



PROGRESS REPORT NO. 163

TO: Robert Tan, U.S. Environmental Protection Agency (EPA) – via Electronic mail
Kathryn Cerise, EPA – via Electronic mail

FROM: Kris McCaig, Teck American Incorporated (TAI)

Cc: Denise Mills, TAI – via Electronic mail
Rob Orr, TAI – via Electronic mail

DATE: February 3, 2020

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 163 Month Ending January 2020

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES) – TAI continued coordination with the SATES team and Kira Lynch, Superfund Technology Liaison with the Office of Research and Development, Office of Science and Policy (and Acting Chief, Site Cleanup Section #3, Remedial Cleanup Branch) during the month. The Ohio State University (OSU) laboratory continued the bench-scale testing of the selected soil amendments through January 2019. The bench tests are being conducted in accordance with the Final Phase II Bench-Scale Treatability Testing Work Plan (May 2019) and Addendum No. 1 (July 2019). Analytical results for the amendment and baseline samples (collected in October 2019 at time point 1) were received by TAI and are pending validation and upload to the UCR database. Time 2 samples were collected on January 11, 2020 for the analyses specified in the EPA-approved Phase II Work Plan. TAI and Ramboll continued working on a method to include input from EPA and other stakeholders for deciding which amendments will be advanced from the bench-scale to the Phase III field-scale pilot testing.

Baseline Ecological Risk Assessment:

Soil Toxicity Reference Values (TRVs) – TAI received comments from EPA on January 17, 2020, on the revised draft “Technical Memorandum for Soil Screening Levels for Plants and Invertebrates for the Baseline Ecological Risk Assessment”

submitted to EPA on December 16, 2019. TAI revised the document and prepared a response to EPA comments, and submitted both to EPA via electronic mail on January 29, 2020.

Weight of evidence (WOE) – TAI continued work on WOE during the month of January to prepare for a webinar with EPA scheduled for February 5, 2020. On January 31, 2020, TAI submitted a strawman proposal weighting scheme for EPA review prior to the conference call.

Chemicals of Potential Concern (COPC) Refinement Document – TAI received approval in a letter from EPA on January 10, 2020 to finalize an addendum with some corrections that were needed to the COPC Refinement for Aquatic and Terrestrial Receptors (finalized August 2019), which affected Tables 4-1 and 6-1 and a small amount of text. TAI finalized the addendum, appended it to the original final COPC Refinement Document, and posted on the UCR RI/FS web site: <https://www.ucr-rifs.com/home/documents-plans/> on January 17, 2020.

Upland Soil Background Assessment – On January 27, 2020, TAI received a letter and detailed comments from EPA on the Draft Final Technical Memorandum, Assessment of Background Concentrations of Metals and Metalloids in Upland Soils, dated September 19, 2019. TAI sent an electronic mail message to EPA on January 31, 2020 with clarifying questions on two of the comments.

Phase 3 Sediment Study Sediment Facies Mapping – TAI submitted the draft data summary report and the draft technical memorandum with sediment composition and facies maps for the river reaches outside the Phase 3 areas of interest (AOIs), on December 17, 2019 and is awaiting comments from EPA.

2019 Phase 3 Sediment Study:

Field collected sediment and porewater analytical chemistry data – TAI submitted validated analytical chemistry data and location information for the field collected sediment and porewater to EPA on January 27, 2020.

Quality Assurance Project Plan (QAPP) – TAI submitted the Phase 3 Sediment Study Draft QAPP Change Request No. 6 to EPA on December 12, 2019 and is awaiting comments from EPA. A conference call occurred on January 28, 2020 with TAI and EPA to discuss results of the porewater extraction method study and as they relate to porewater extraction methods that are being considered for the Phase 3 Sediment Study bioassay tests.

Toxicity Identification Evaluation (TIE) Pilot Study – TAI received comments from EPA via electronic mail on January 17, 2020 on the draft technical memorandum dated December 13, 2019 describing the plan for additional work to help refine the study plan for TIEs in the Phase 3 Sediment Study.

Bioassay Sample Selection and Batching – TAI received comments from EPA via electronic mail on January 20, 2020 on the draft technical memorandum dated December 16, 2019 with bioassay sample selection and batching recommendations. TAI submitted response to EPA comments and a revised technical memo to EPA on January 31, 2020.

Backscatter Electron Microscopy (BSEM) – TAI received an electronic mail message from EPA on January 16, 2020 with two attachments; a letter dated January 20, 2020 and a comment table dated January 16, 2020. The comment table provided EPA's comments on the draft technical memorandum dated December 18, 2019 with proposed samples for BSEM analysis.

Porewater Extraction Method Study – TAI sent an electronic mail message to EPA on January 9, 2020 with an attached data file and an update on the study. As mentioned above, a conference call occurred on January 28, 2020 to discuss results of the porewater extraction method study and as they relate to porewater extraction methods that are being considered for the Phase 3 Sediment Study bioassay tests and to answer study questions related to use of the bioassay laboratory porewater data from the Phase 2 Sediment Study.

EPA Draft QAPP for Bioassay Split Sample Analysis – Per TAI's request, EPA provided additional Standard Operating Procedures and Data Management Plan on January 17, 2020. TAI sent an electronic mail message to EPA on January 29, 2020 with a comment table and a reline version of the Draft Final QAPP for Phase 3 Sediment Study Bioassay Split Sample Analysis and Appendix A.

Human Health Risk Assessment – On January 10, 2020, a second conference call was held between TAI and EPA to continue discussion of TAI's preliminary questions on the Draft Site-wide Human Health Risk Assessment (draft HHRA); some that were from the December 10, 2019 call and some that were provided by TAI via electronic mail on January 3, 2020. TAI submitted comments on the draft HHRA to EPA in a cover letter and attached technical memorandum on January 15, 2020. TAI also coordinated with EPA on the agenda for the in-person meeting scheduled for February 6, 2020.

Archived RI/FS Sample Disposal – TAI received permission via two separate electronic mail messages dated January 3, 2020 to dispose of archived Northern Pike filet tissue and mussel and crayfish tissue samples per TAI's request.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.